#### **Overview of AB 32**

#### **Catholic Diocese**

Stockton, CA

Sharon Anderson
California Air Resources Board
June 25, 2008

#### **Outline**

- Overview of the ARB
- AB 32: The Global Warming Solutions Act of 2006
- Scoping Plan development
- Actions on Climate Change

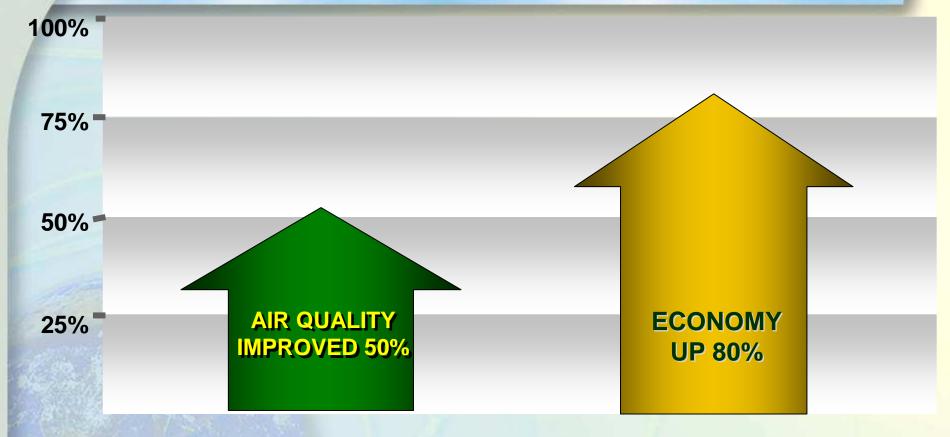
## **Air Resources Board**

- Part of Cal/EPA
- Eleven appointed Board members
- Primary legal mandates:
  - Ensure continuous progress toward attaining health-based air quality standards
  - Reduce public exposure to toxic air contaminants

# **ARB Control Programs**

- Criteria pollutants SIPs
  - Regs on cars/light-trucks, stationary sources
- Air Toxics Programs
- Diesel Risk Reduction Plan
- Goods Movement Emission Reduction Plan
- Incentives
  - Carl Moyer Program, Prop 1B, AB 118
- Enforcement
- Research

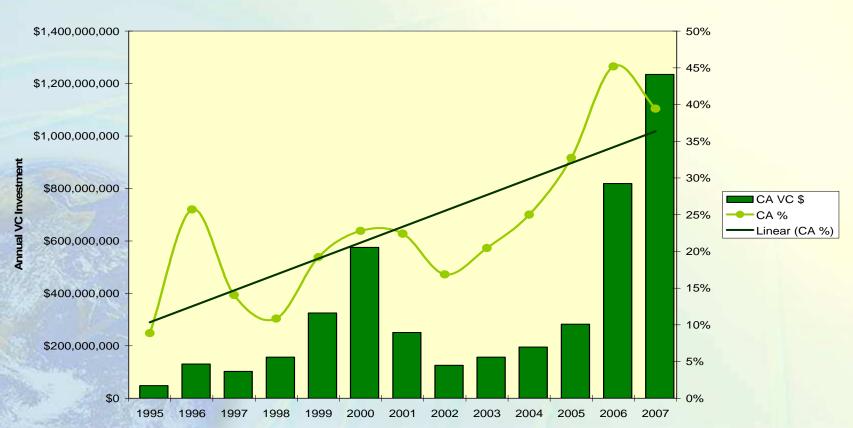
# A Strong Economy Is Compatible with Clean Air



Change in California Since 1980's

## **Greentech Benefits**

#### California's Growing Share of Venture Capital Investment in Energy Innovation, 1995-2007 (current \$)

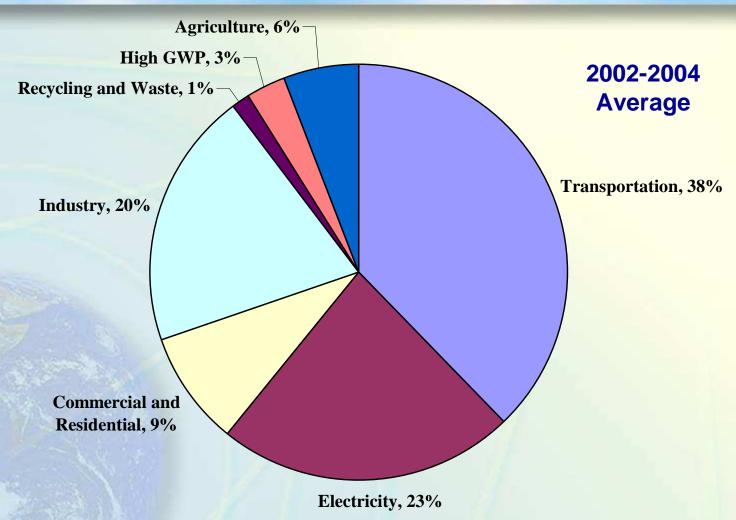


#### What Is AB 32?

- Legislation outlining plan to reduce GHGs
- Sets 2020 GHG limit at 1990 level
  - Acknowledges that 2020 is not the endpoint
- ARB to monitor/regulate GHG sources
- Creates Environmental Justice Committee, ETAAC
- Informed by MAC and Climate Action Team
- Air Resources Board lead, but extensive collaboration with other agencies

Large new effort, but must not detract from ARB's health-based programs

## **California GHG Emissions**

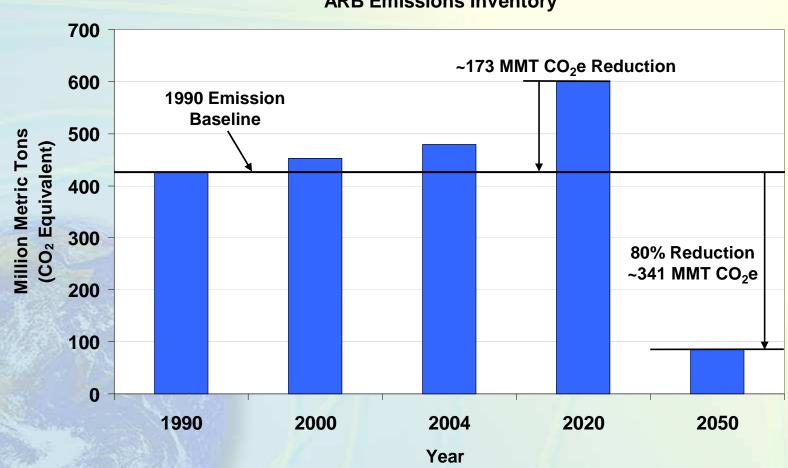


# **California GHG Emissions**

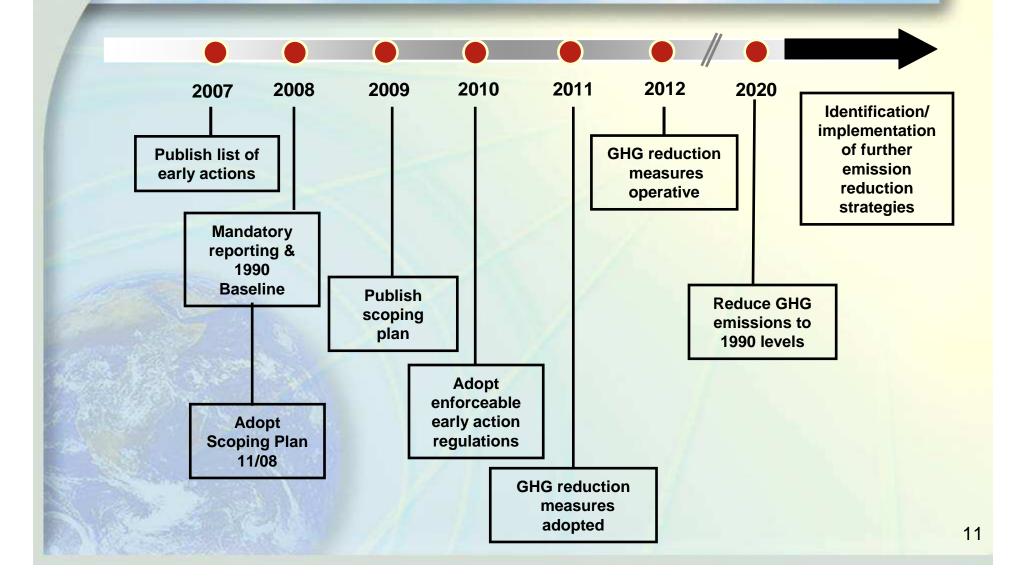
Sector	2002-2004 Average Emissions	Projected 2020 Emissions
Transportation	179.3	225.4
Electricity	109.0	139.2
Commercial and Residential	41.0	46.7
Industry	95.9	100.5
Recycling and Waste	5.6	7.7
High GWP	14.8	46.9
Agriculture	27.7	29.8
Forest Net Emissions	-4.7	0
Emissions Total (2002-2004 Average)	469	596

# **Magnitude of the Challenge**

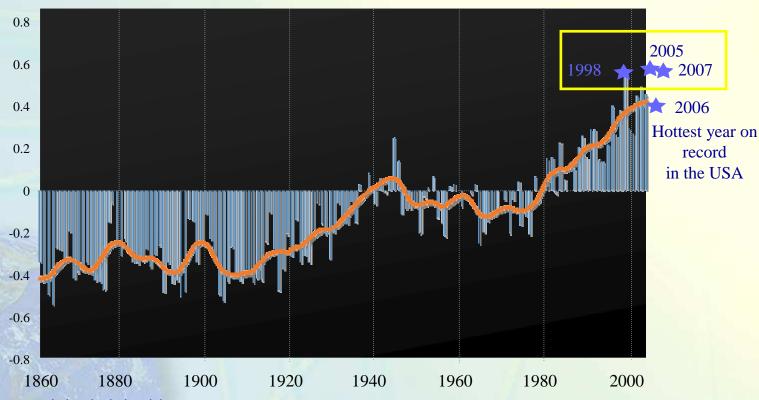
#### **ARB Emissions Inventory**



#### **AB 32 Timeline**



# Global Average Temperature Since 1860



- →0.8℃ increase during the industrial era
- →Another 0.7℃ locked in
- →0.5℃ remain to avoid worst global warming impacts
- →2006 July heat wave contributed tto more than 140 California deaths with 25,000 cattle and 700,000 poultry also dying

# **Accomplished in 2007**

- Set 2020 emission cap at 427 MMT
- Adopted Mandatory Reporting Requirement for major GHG Emitters
- Approval to go ahead with early action items
  - Low Carbon Fuel, Auto Refrigerants, Landfill Gas,
     Truck Efficiency, Semiconductor Perflurocarbons,
     Can Propellants, Tire Inflation, and others
- Forests Protocols methods to measure amount of GHGs stored in forests
- Adopted port electrification regulation

# **Scoping Plan**

- Describes how California will reduce GHG emission levels to 1990 levels by 2020
  - Address every sector of the economy
- Provides a vision for a low carbon future -2020 and 2050
- Maximize benefits to California
  - Criteria and toxic air pollutants reductions
  - Economic development (greentech)
- Must assess economic, environmental, public health and societal impacts in Plan

# **Required Evaluations**

- Scoping Plan (§38561(d))
  - Economic and non-economic costs and benefits to economy, environment and public health
- Regulations (§38562(b))
  - No disproportionate impact on low-income communities;
     complement efforts to achieve AQ standards and reduce toxics; consider overall societal benefits
- Market-Based Compliance (§38570(b))
  - Consider direct, indirect, and cumulative impacts including localized impacts; prevent increase in toxics or criteria pollutants
- Community Benefit Section (§38565)

# **Draft Scoping Plan Measures**

- Reductions about 70% of tons
  - Car standards, low carbon fuel standard, land use, energy efficiency, renewable portfolio standard
- Options for remaining tons
  - Direct regulations
  - Cap and trade program
  - Carbon fees
- Expect positive overall impact on co-pollutants
  - Increased efficiency and reduced fuel use

# **Scoping Plan Evaluations**

- Economic
  - Impact on state economy, personal income (by household income), employment, prices
- Environmental
  - Impact of Draft Plan measures on co-pollutants
- Public Health Evaluation
  - Based on environmental evaluation
- Societal Impacts
  - Energy diversity
  - Mobility
  - Community benefits

- Job creation
- Regressivity
- Small business

# **Scoping Plan Timeline**

- Draft Scoping Plan release: June 26
  - Evaluation supplement release: Summer
- Public workshops
  - July 8: Diamond Bar
  - July 14: Fresno
  - July 17: Sacramento
  - August: TBD
- Community meetings being scheduled
- Proposed Scoping Plan release: early Oct
- Board considers Proposed Plan: November

### **Mandatory Reporting & Verification**

- Industrial Sources of 25,000+ Metric Tons of CO2 Per Year from Stationary Combustion
  - Begin tracking in 2008, Begin reporting in 2009
- Electricity: Generating, Retailing, Marketing & Cogeneration Facilities
- Oil Refineries
- Hydrogen Plants
- Cement Plants
- (Excludes Schools & Hospitals)
- (Not the benchmark for possible controls)

#### **Local Government Activities**

- Local governments showing climate leadership
- ARB building "toolkit" for local governments
- Climate Action Team
  - Support for local activities
  - Guidance on possible reduction strategies
- Land use and transportation

# What Can We Do *Now*? Government, Business, & Public

- Reduce Vehicle Miles Traveled
- Improvements to Trucking Fleets & Other Vehicles
- Reduce Water Usage (Greatest Electricity User)
- Landscaping and Sprinkler Systems
- Energy Efficient "Green" Building Standards
- More Efficient Lighting
- More Efficient Air Conditioning
- Solar Power
- Better Zoning and Planning

#### **Contacts and More Information**

- ARB Climate Change Web Site
  - http://www.arb.ca.gov/cc/cc.htm
  - http://www.coolcalifornia.org
  - http://www.fypower.org
- California Climate Change Portal

http://www.climatechange.ca.gov

Contacts: Sharon Anderson, shanders@arb.ca.gov

(916) 324-0934

Rich Varenchik, General Information

(626) 575-6730